

Europäisches Patentamt
European Patent Office
Office européen des brevets



11 Publication number:

0 651 142 A3

(12)

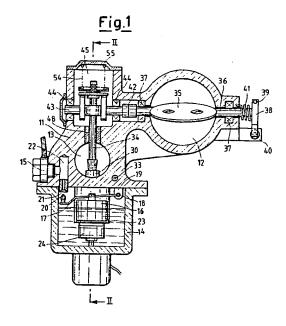
EUROPEAN PATENT APPLICATION

(2) Application number: 94202731.9

2 Date of filing: 22.09.94

(5) Int. Cl.⁶: **F02B 25/20**, F02M 7/14, F02M 7/18

- Priority: 01.10.93 IT MI932098
- Date of publication of application:03.05.95 Bulletin 95/18
- Designated Contracting States:
 AT BE CH DE ES FR GB LI
- Date of deferred publication of the search report: 20.09.95 Bulletin 95/38
- 7) Applicant: PIAGGIO VEICOLI EUROPEI S.p.A. Viale Rinaldo Piaggio 23
 I-56025 Pontedera
 Pisa (IT)
- Inventor: Nuti, Marco Via Nisi, 2 I-56100 Pisa (IT)
- (a) Representative: Fusina, Gerolamo et al Ing. Barzanò & Zanardo Milano S.p.A, Via Borgonuovo, 10 I-20121 Milano (IT)
- Mixture preparation device for double-feed engines.
- (5) A mixture preparation device for double-feed engines comprising a body (11) in which two ducts are provided, namely a first duct (12) for air feed to the crankcase and a second duct (13) connected to an injection device, throttle elements (10, 35) being provided for the two ducts (12, 13), in the second duct (13) connected to the injection device there being provided an air-fuel mixture emission unit (29-34) adjustable in its degree of opening, the opening being controlled by transmission elements (49, 50) operationally connected to a shaft (36, 43) carrying one of the throttle elements (35) positioned within the first duct (12) for air feed.





EUROPEAN SEARCH REPORT

Application Number EP 94 20 2731

		DERED TO BE RELEVAN	 				
Category	Citation of document with i	ndication, where appropriate, ssages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)			
X	DE-A-15 26 691 (INS PÉTROLE) * page 7, paragraph 1; figure 1A * * page 8, paragraph * page 9, paragraph * page 10, paragrap	5 - page 8, paragraph 14 * 13 *	1	F02B25/20 F02M7/14 F02M7/18			
Y	* page 13, paragrap * page 15 *	oh 2 -paragraph 3 *	2,5	-			
Y	GB-A-2 054 050 (BOR * page 1, line 113 * page 2, line 5 -	- line 124; figure 1 *	2,5				
X	FR-A-2 431 605 (JAU * page 2, line 35 - * page 5, line 13 -		1				
X	FR-A-2 244 912 (YAM * page 1, line 20 - * page 2, line 25 - * page 3, line 6 - * page 3, line 26 - * page 6, line 1 - * page 6, line 28 -	line 31 * line 28 * line 9 * page 4, line 20 * line 2 *	1	TECHNICAL FIELDS SEARCHED (Int.Cl.6) F02B F02M			
A	US-A-3 940 459 (TIP * column 2, line 33	TON) 3 - line 37; figure 1 *	3				
A	EP-A-0 006 770 (SIE * page 1, line 1 - * page 3, line 26 - 1 *		4	·			
A -	US-A-2 947 295 (ASP * column 1, line 45 * column 2, line 35		1				
			_				
	The present search report has t						
	Place of search	Date of completion of the search		Examiner			
Y:pa	THE HAGUE CATEGORY OF CITED DOCUME reticularly relevant if taken alone reticularly relevant if combined with an cument of the same category beneficied beckersoned.	E : earlier patent di after the filing oother D : document cited L : document cited	ple underlying the ocument, but pub- date in the application for other reasons	olished on, or n			
A : technological background O : non-written disclosure P : intermediate document		& : member of the document	&: member of the same patent family, corresponding document				



EUROPEAN SEARCH REPORT

Application Number EP 94 20 2731

Category	Citation of document with of relevant pr	indication, where appropriate,		Relevant to claim	CLASSIFICATI APPLICATION	
A	1984	F JAPAN 274) (1465) 7 February (NIHON) 1 November 1983	1			
A .	FR-A-2 222 534 (YAN * page 3, line 22 - * page 3, line 35 - * page 4, line 24 - * page 4, line 40 - * page 9, line 14 -	- line 24; figures 1,6 * - line 38 * - line 27 * - page 5, line 23 *	1		-	
A	EP-A-0 015 792 (ANV * page 5, line 26 - * page 6, line 33 - * page 8, line 4 - * page 4, line 28 - * page 9, line 9 -	page 6, line 15 * page 7, line 3 * line 13 * line 36 *	1			
A	DE-A-37 22 424 (BOM	BARDIER-ROTAX)			TECHNICAL F SEARCHED	TELDS (Int.Cl.6)
Y	DE-A-15 26 691 (INSPETROLE) * page 7, paragraph 1; figure 1A * * page 8, paragraph * page 9, paragraph * page 10, paragraph * page 13, paragraph * page 15 *	1 5 - page 8, paragraph 1 4 * 1 3 * 1 1 -paragraph 2 *	6-	10		
Y	US-A-2 856 169 (MUS * column 4, line 62 * column 4, line 73 figure 5 *	2 - line 70 * 3 - column 5, line 14;	6,	7,9		
	Place of search	Date of completion of the search		<u> </u>	Examiner	
	THE HAGUE	17 July 1995		Jor	is, J	
X : part Y : part doct A : tech O : non	CATEGORY OF CITED DOCUME icularly relevant if taken alone icularly relevant if combined with an ument of the same category inological background -written disclosure muediate document	E : earlier patent doc after the filing da	umente a the ar oth	derlying the nt, but publication application ner reasons	invention shed on, or	



EUROPEAN SEARCH REPORT

Application Number

Category	Citation of document with indicat of relevant passage		Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CL6)
Y	GB-A-1 148 584 (VEB BE VERGASER-FABRIK) * page 3, line 28 - li	RLINER	8	
Ý	FR-A-736 403 (THOMAS E * page 2, line 57 - li * page 2, line 85 - li	ne 73: figures 1.2	* 10	
١	US-A-2 103 368 (HOOF) * page 2, left column, * page 2, right column	 line 59 - line 70 [:] , line 48 - line 70	6,7,9,10	
	* page 3, right column figures 4,7 *	, line 7 - line 25;		
	· ·		1.	
	•	•		
.		•		
				TECHNICAL FIELDS SEARCHED (Int.Cl.6)
	•			
		•		
	The average country is			
	The present search report has been dra	Date of completion of the search		
	THE HAGUE	17 July 1995	lan!	Examiner
X : parti Y : parti	ATEGORY OF CITED DOCUMENTS cularly relevant if taken alone cularly relevant if combined with another ment of the same category	T: theory or princip E: earlier patent do after the filling d D: document cited L: document cited	cument, but publish late in the application	vention



European Patent Office

EP 94 20 2731 -B-

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of inventions and relates to several inventions or groups of inventions, namely:

1. Claims 1-5:

Mixture preparation device for double-feed engines and an air-fuel mixture emission unit

2. Claims 1,6-10:

Mixture preparation device for double-feed engines and transmission elements between a throttle shaft and the adjustable air-fuel mixture emission unit



European Patent

Office

С	LAIMS INCURRING FEES
The prese	ent European patent application comprised at the time of filing more than ten claims.
	All claims tees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
	Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid.
	namely claims:
	No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.
LA	CK OF UNITY OF INVENTION
The Searc invention a namely:	n Division considers that the present European patent application does not comply with the requirement of unity of nd relates to several inventions or groups of inventions,
se	e sheet -B-
X	All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
	Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respects of which search fees have been paid.
	namely claims:
	None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims.
	namely daims: